



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/915,472	07/26/2001	John Bodenschatz	13156US02	6327
23446	7590	11/26/2004	EXAMINER WARE, CICELY Q	
MCANDREWS HELD & MALLOY, LTD 500 WEST MADISON STREET SUITE 3400 CHICAGO, IL 60661			ART UNIT 2634	PAPER NUMBER

DATE MAILED: 11/26/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/915,472	<b>Applicant(s)</b> BODENSCHATZ, JOHN	
	<b>Examiner</b> Cicely Ware	<b>Art Unit</b> 2634	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 26 July 2001.
- 2a) ☐ This action is FINAL.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4, 8-14 and 17-24 is/are rejected.
- 7) ☒ Claim(s) 5-7, 15 and 16 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 July 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |                                                                                                    |                                                                             |
|----------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. _____                                                |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>2</u> .                                                                   | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

### *Drawings*

1. The drawings are objected to because:
  - a. Examiner suggests applicant switch Fig. 8 with Fig. 9 for sequential purposes with the other figures. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Specification***

2. The disclosure is objected to because of the following informalities:

- a. Pg. 1, lines 1-2, examiner suggests applicant delete these lines.
- b. Pg. 1, line 12, examiner suggests applicant insert correct US Patent

Application number for clarification purposes.

- c. Pg. 2, line 3, applicant uses the phrase "is a need for system and".

Examiner suggests using "is a need for a system and" for clarification purposes.

- d. Pg. 2, examiner suggests applicant move Pg. 3, line 1 to Pg. 2, line 11.
- e. Pg. 4, examiner suggest applicant move Pg. 5, line 1 to Pg. 4, line 21.
- f. Pg. 5, line 4, applicant uses "DVI". Examiner suggests applicant spell out

all first instances of acronyms for clarification purposes.

- g. Pg. 6, examiner suggests applicant move Pg. 7, line 1 to Pg. 6, lines 4.
- h. Pg. 7, line 16, applicant uses the phrase "first clock rated". Examiner

suggests using "first clock rate" for clarification purposes.

Appropriate correction is required.

3. The specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-3 are rejected under 35 U.S.C. 102(b) as being anticipated by  
Dambacher (US Patent 5,521,943).

(1) With regard to claim 1, Dambacher discloses in (Fig. 10), a system for generating a first clock frequency for a plurality of data bursts compressed in time (Fig. 2), the system comprising: a transmitter for transmitting a composite stream using the data bursts clocked at a second clock frequency; and a receiver for acquiring said composite stream and generating the first clock frequency (col. 5, lines 17-24, col. 8, lines 49-57).

(2) With regard to claim 2, claim 2 inherits all the limitations of claim 1.  
Dambacher further discloses in (Fig. 2) wherein said second clock frequency is higher than the first clock frequency (col. 8, lines 49-57).

(3) With regard to claim 3, claim 3 inherits all the limitations of claim 1.  
Dambacher further discloses in (Fig. 11) wherein said receiver includes a de-multiplexer (36) for outputting the data bursts at the first clock frequency.

6. Claims 9-14 and 17 rejected under 35 U.S.C. 102(a) as being anticipated by Sporer et al. (US Patent 6,091,778).

(1) With regard to claim 9, Sporer et al. discloses in (Fig. 1) a system for generating digital data bursts at a first clock rate, the system comprising: means for acquiring a composite stream (50); means for determining the audio pixels per line in said acquired composite stream; and means for determining the first clock rate (col. 6, lines 18-30, 53-52, 60-67, col. 7, lines 6-15).

(2) With regard to claim 10, claim 10 inherits all the limitations of claim 9. Sporer et al. further discloses including a means for forming said composite stream (Fig. 1 (62), col. 6, lines 18-30).

(3) With regard to claim 11, claim 11 inherits all the limitations of claim 10. Sporer et al. further discloses wherein said forming means includes a transmitter (Fig. 1 (50), col. 6, lines 38-56).

(4) With regard to claim 12, Sporer further discloses in (Fig. 1) a method of generating data bursts at a first clock rate, said method comprising the steps of: forming a composite stream of audio and video data (62); acquiring said composite stream (50); and determining the first clock rate for the data bursts from said composite stream (col. 6, lines 60-67, col. 7, lines 6-15).

(5) With regard to claim 13, claim 13 inherits all the limitations of claim 12. Sporer et al. further discloses transmitting said composite stream at a second clock rate (col. 6, lines 65-67, col. 7, lines 1-2).

(6) With regard to claim 14, claim 14 inherits all the limitations of claim 13. Sporer et al. further discloses wherein said second clock rate is greater than the first clock rate (col. 7, lines 1-2).

(7) With regard to claim 17, claim 17 inherits all the limitations of claim 12. Sporer et al. further discloses inserting audio data into video data forming said composite stream (col. 7, lines 12-14).

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 4, 8, 21-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dambacher (US Patent 5,521,943) as applied to claim 1, in view of Pereira et al. (US Patent 5,937,021).

(1) With regard to claim 4, claim 4 inherits all the limitations of claim 1 above. However Dambacher does not disclose wherein said de-multiplexer includes a FIFO circuit.

However Pereira et al. discloses wherein said de-multiplexer includes a FIFO circuit (col. 1, lines 51-62, col. 3, lines 8-11).

Therefore it would have been obvious to one of ordinary skill in the art to modify Dambacher to incorporate wherein said de-multiplexer includes a FIFO circuit in order

to control the size of the buffer memory to allow for maximum acceptable jitter at a hierarchical interface (Pereira et al., col. 1, lines 53-54, col. 3, lines 8-10).

(2) With regard to claim 8, Pereira et al. further discloses a phase locked loop for computing the width of one period of a clock pulse at the first clock frequency and generating a clock pulse at the original clock frequency in order to regenerate a clock that does not have any holes in which the transitions are regular and deliver a regular clock, having that same frequency as the mean frequency of the clock having holes (col. 2, lines 64-67, col. 3, lines 1-3, col. 6, lines 30-33, 39-63).

(3) With regard to claim 21, claim 21 inherits all the limitations of claim 8. Dambacher further discloses in Fig. 2, generating a clock pulse at the first clock frequency.

(4) With regard to claim 22, claim 22 inherits all the limitations of claim 21. Dambacher further discloses a method of generating a first clock frequency for a plurality of digital data sub-blocks compressed in time (Fig. 2, col. 8, lines 15-23).

(5) With regard to claim 23, claim 23 inherits all the limitations of claims 21 and 22.

(6) With regard to claim 24, claim 24 inherits all the limitations of claim 22.

9. Claims 18-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sporer et al. (US Patent 6,091,778) as applied to claim 12, in view of Dambacher (US Patent 5,521,943).

(1) With regard to claim 18, claim 18 inherits all the limitations of claim 12 above.



However Sporer et al. does not disclose acquiring a width in data elements of a digital data burst.

However Dambacher discloses acquiring a width in data elements of a digital data burst (Fig. 2, col. 8, lines 49-58).

Therefore it would have been obvious to one of ordinary skill in the art to modify Sporer et al. to incorporate acquiring a width in data elements of a digital data burst in order to transmit a greater amount of data by the respective broadband transmitter of the individual transmitting stations to the consumer receivers (Dambacher, col. 1, lines 64-67).

(2) With regard to claim 19, claim 19 inherits all the limitations of claim 12. Dambacher further discloses acquiring a width in data elements of a data block of higher speed digital data (Fig. 2, col. 8, lines 49-58).

10. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sporer et al. (US Patent 6,091,778) as applied to claim 12, in view of Pereira et al. (US Patent 5,937,021).

With regard to claim 20, claim 20 inherits all the limitations of claim 12 above. However Sporer et al. does not disclose computing a width of one period of a clock pulse oat the first clock frequency.

However Pereira et al. discloses computing a width of one period of a clock pulse oat the first clock frequency (col. 2, lines 64-67, col. 3, lines 1-3, col. 6, lines 30-33, 39-63).

Therefore it would have been obvious to one of ordinary skill in the art to modify Sporer et al. to incorporate computing a width of one period of a clock pulse out the first clock frequency in order to regenerate a clock that does not have any holes in which the transitions are regular and deliver a regular clock, having that same frequency as the mean frequency of the clock having holes (Pereira et al., col. 1, lines 30-35).

***Allowable Subject Matter***

11. Claims 5, 6, 7, 15, 16 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The following is a statement of reasons for the indication of allowable subject matter: The instant application discloses a system for generating a first clock frequency for a plurality of data bursts compressed in time. Prior art references show similar methods but fail to teach: **“a de-multiplexer includes a phase locked loop adapted to generate the first clock frequency using said second clock frequency”**, as in claim 5, **“digital phase locked loop includes a second order feedback loop”**, as in claim 6, **“second order feedback loop includes a half period calculator circuit”**, as in claim 7, **“computing the average number of audio pixels per line”**, as in claim 15, **“determining the first clock includes using a total line width and number of audio pixels in each line”**, as in claim 16.

Art Unit: 2634

**Conclusion**

12. The prior art made record and not relied upon is considered pertinent to applicant's disclosure:

a. Huisken et al. US Patent 5,862,189 discloses de-interleaving and buffering in one memory.

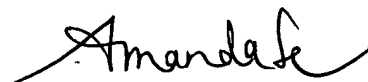
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cicely Ware whose telephone number is 571-272-3047. The examiner can normally be reached on Monday – Friday, 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Chin can be reached on 571-272-3056. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9314 for regular communications and 703-872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

*Cicely Ware*

cqw  
November 9, 2004



AMANDA T. LE  
PRIMARY EXAMINER